



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,539	03/31/2004	Priya Rajagopal	884.B76US1	7163
21186 7590 09/04/2007 SCHWEGMAN, LUNDBERG & WOESSNER, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			EXAMINER KANE, CORDELIA P	
			ART UNIT 2132	PAPER NUMBER
			MAIL DATE 09/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/815,539

Applicant(s)

RAJAGOPAL ET AL.

Examiner

Cordelia Kane

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the non-provisional application filed on March 31, 2004. Claims 1 – 25 are pending. Claims 1, 9, and 18 are independent.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 18 – 25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims fail to place the invention squarely within one statutory class of invention. On page 14, lines 8 – 9 of the instant specification, applicant has provided evidence that applicant intends the “medium” to include signals. As such, the claim is drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claims are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of substances and therefor not a composition of matter.

Claim Objections

4. Claim 15 is objected to because of the following informalities: Claim 15 recites the limitation "The system of claim 8" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

5. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1, 4 – 9, 12 – 18, and 21 – 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coss et al's US Patent 6,154,775 and further in view of Randy H. Katz's Contemporary Logic Design. Referring to claims 1, 9, and 18, Coss discloses:

- a. Receiving state rules (column 4, lines 4-6).
- b. Forming a set of rules including at least one condition and one action (column 4, lines 30-34).
- c. Storing a set of filters in a filter database (column 4, lines 5-6).
- d. Receiving a network flow including a plurality of packets (column 6, lines 29-30, Figure 5, element 501).

- e. Applying the state rules to the plurality of packets in the network flow (column 6, lines 18-21).
 - f. Wherein the at least one action comprises instantiation of a filter (column 4, line 48).
9. Coss does not explicitly disclose passing the definitions as a state machine. However, Katz discloses that state machines are critical for realizing the control and decision making logic in digital systems (page 383, 2nd paragraph).
10. Katz and Coss are analogous art because they are from the same field of endeavor, digital systems. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Coss and Katz before him or her, to modify Coss to include the state machine of Katz. The motivation for doing so would have been that state machines are critical for realizing the control and decision making logic in digital systems (page 383, 2nd paragraph).
11. Referring to claims 4, 12, and 21, Coss teaches wherein the filter comprises a dynamic filter (column 8, lines 27-30).
12. Referring to claims 5, 13, 22, Coss teaches wherein the filter comprises a static filter (Figure 3). Static rules are defined in applicant's specification as a rule that applies to aggregate flows. In Figure 3, all flows from A to B of type FTP are Passed.
13. Referring to claims 6, 14, and 23, Coss teaches saving the result of the at least one action for use in a later executed rule (column 5, lines 40-42).
14. Referring to claims 7, 15, and 24, Coss teaches deactivating a rule (column 8, lines 36-38).

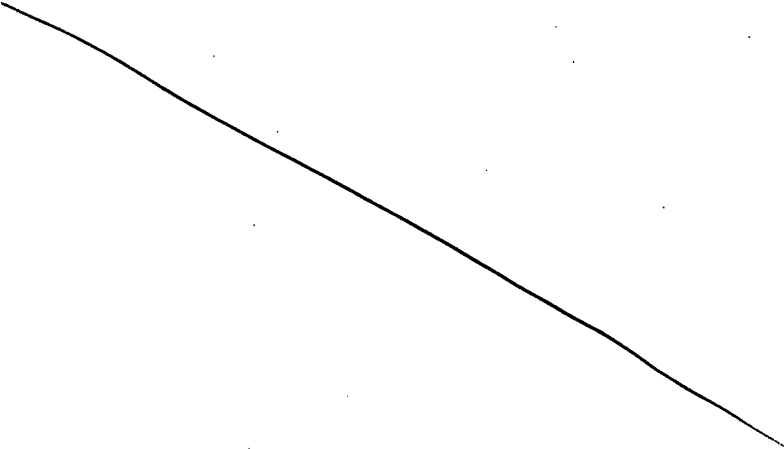
Art Unit: 2132

15. Referring to claims 8, 16, and 25, Coss teaches activating a rule (column 8, lines 13-15).

16. Referring to claim 17, Coss teaches maintaining a state table for the network flow (column 5, lines 38-55).

17. Claims 2, 3, 10, 11, 19 and 20 are rejected under 35 USC 103 (a) as being obvious over Coss in view of Katz, and further in view of Stockwell et al's US Patent 5,950,195. Coss in view of Katz discloses all the limitations of the parent claim. Coss in view of Katz does not explicitly disclose analyzing the context of the network, including the application layer. However, Stockwell discloses that the firewall processes traffic at the application layer (column 4, lines 31-34).

18. Coss in view of Katz and Stockwell are analogous art because they are from the same field of endeavor, firewalls. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Coss in view of Katz and Stockwell before him or her, to modify Coss in view of Katz to include application layer processing of Stockwell. The motivation for doing so would have been the ability to monitor content as well as provide authentication and identification services as well as access control and auditing (column 4, lines 35-37).



Art Unit: 2132

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cordelia Kane whose telephone number is 571-272-7771. The examiner can normally be reached on Monday - Thursday 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cordelia Kane
Patent Examiner
Art Unit 2132



GILBERTO BARRON JR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100